



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/301,906	04/29/99	GONSALVES	D 07678/077002

PAUL T. CLARK  
CLARK & ELBING LLP  
176 FEDERAL STREET  
BOSTON MA 02110

HM22/0214

EXAMINER

BUI, P

ART UNIT	PAPER NUMBER
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1638

DATE MAILED:

02/14/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/301,906**

Applicant(s)  
**Gonsalves et al.**

Examiner  
**Phuong Bui**

Group Art Unit  
**1638**



☒ Responsive to communication(s) filed on Nov 20, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-7, 10, 12, 14, and 16-34 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-7, 10, 12, 14, and 16-34 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1638

### **DETAILED ACTION**

1. Applicant's Reply to the Restriction Requirement and Amendment filed November 20, 2000 have been received. In response to Applicant's election and traversal of the restriction requirement contained therein, the Office is modifying the restriction requirement as set forth below. In view of the modified restriction requirement, Applicant is given a new opportunity to elect a single invention within the scope of this modified requirement. Any inconvenience this situation may have caused Applicant is regretted.

#### ***Election/Restriction***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1 and 4, drawn to a proteinase, classified in class 435, subclass 219.
  - II. Claims 1 and 5, drawn to a methyltransferase, classified in class 435, subclass 193.
  - III. Claim 1, drawn to a helicase, classified in class 435, subclass 183.
  - IV. Claim 1, drawn to SEQ ID NO:11 (orf 1b), classified in class 530, subclass 350.
  - V. Claim 1, drawn to SEQ ID NO:13 (orf 11), classified in class 530, subclass 300.
  - VI. Claims 1-3, drawn to a combination protein having domains with proteinase, methyltransferase, and helicase activities, classified in class 435, subclass 183.
  - VII. Claims 6, 12, and 19-31, drawn to a nucleic acid encoding proteinase, classified in class 536, subclass 23.2.
  - VIII. Claims 6, 14, and 19-31, drawn to a nucleic acid encoding methyltransferase, classified in class 536, subclass 23.2.

Art Unit: 1638

- IX. Claims 6, 16, and 19-31, drawn to a nucleic acid encoding helicase, classified in class 536, subclass 23.2.
- X. Claims 6, 17, and 19-31, drawn to a nucleic acid encoding SEQ ID NO:11, classified in class 536, subclass 23.72.
- XI. Claims 6, and 18-31, drawn to a nucleic acid encoding SEQ ID NO:13, classified in class 536, subclass 23.72.
- XII. Claims 7, 19, 20, and 22-31, drawn to nucleic acid SEQ ID NO:2 (5' untranslated region), classified in class 536, subclass 24.1.
- XIII. Claims 7, 19, 20, and 22-31, drawn to nucleic acid SEQ ID NO:14 (3' untranslated region), classified in class 536, subclass 24.1.
- XIV. Claim 10, drawn to a nucleic acid hybridizing to SEQ ID No:3, classified in class 536, subclass 23.2.
- XV. Claim 32, drawn to an antibody of proteinase, classified in class 530, subclass 388.26.
- XVI. Claim 32, drawn to an antibody of methyltransferase, classified in class 530, subclass 388.26.
- XVII. Claim 32, drawn to an antibody of helicase, classified in class 530, subclass 388.26.
- XVIII. Claim 32, drawn to an antibody of SEQ ID NO:11, classified in class 530, subclass 387.9.

Art Unit: 1638

- XIX. Claim 32, drawn to an antibody of SEQ ID NO:13, classified in class 530, subclass 387.9.
- XX. Claim 33, drawn to a method of detection using proteinase antibody, classified in class 435, subclass 23.
- XXI. Claim 33, drawn to a method of detection using methyltransferase antibody, classified in class 435, subclass 15.
- XXII. Claim 33, drawn to a method of detection using helicase antibody, classified in class 435, subclass 7.4.
- XXIII. Claim 33, drawn to a method of detection using antibody to SEQ ID NO:11, classified in class 435, subclass 7.1.
- XXIV. Claim 33, drawn to a method of detection using antibody to SEQ ID NO:13, classified in class 435, subclass 7.1.
- XXV. Claim 34, drawn to a method of detection using proteinase nucleic acid, classified in class 435, subclass 6.
- XXVI. Claim 34, drawn to a method of detection using methyltransferase nucleic acid, classified in class 435, subclass 6.
- XXVII. Claim 34, drawn to a method of detection using helicase nucleic acid, classified in class 435, subclass 6.
- XXVIII. Claim 34, drawn to a method of detection using SEQ ID NO:11 nucleic acid, classified in class 435, subclass 6.

Art Unit: 1638

XXIX. Claim 34, drawn to a method of detection using SEQ ID NO:13 nucleic acid, classified in class 435, subclass 6.

XXX. Claim 34, drawn to a method of detection using SEQ ID NO:2 nucleic acid, classified in class 435, subclass 6.

XXXI. Claim 34, drawn to a method of detection using SEQ ID NO:14 nucleic acid, classified in class 435, subclass 6.

3. The inventions are distinct, each from the other because of the reasons set forth in the previous Office action.

4. Inventions VI and XIV are newly identified inventions that are related to inventions I-V and VII-XI, respectively, as combination and subcombinations thereof. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not rely solely upon the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not rely solely upon the particulars of the subcombination for patentability as claimed as evidenced by the presence of independent claims to each of the subcombination inventions. The subcombinations have separate utilities as enzymes separate from the other enzymes.

Art Unit: 1638

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, searches, and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Applicant's election with traverse of in Paper No. is acknowledged. The traversal is on the ground(s) that the requirement is inconsistent with "the partial waiver of 37 CFR 1.141 for nucleotide sequences." Applicant refers to the Notice of November 19, 1996, 1192 O.G. 68.

This is not found persuasive because the referenced OG Notice does not apply to situations where the claimed nucleotide sequences are known to encode proteins having defined functions as herein. With regard to the antisense sequences corresponding to the claimed sequences, the modified groupings incorporate these with the claimed sequences.

Applicant further asserts that because the proteins are encoded by the GLR-aV-3 genome, and are similarly classified, examination of each of these in one case would not be a burden to the

Art Unit: 1638

Office. However, each of the recited proteins is functionally and structurally divergent. The search, which would require both literature and sequence database searching would be divergent for each of the recited proteins. Accordingly, examination of each of these proteins in a single case would present a considerable resource burden on the Office.

Finally, though DNA, protein, and antibody are initially produced or discovered using one of the other inventions, each of these inventions represents a structurally and functionally unique molecule. Further, each can be produced without the others and each has utilities apart from the others as previously set forth.


9. Papers relating to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Bui whose telephone number is (703) 305-1996. The Examiner can normally be reached Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anthony Caputa, can be reached at (703) 308-3995.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

Phuong Bui  
Primary Examiner  
Group Art Unit 1638  
February 10, 2001

  
PHUONG T. BUI  
PRIMARY EXAMINER